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Fighting Blindness Canada: View Point Webinar

ACCESSIBILITY IN ACTION: EXPLORING TECHNOLOGIES FOR PEOPLE LIVING WITH VISION LOSS

Speakers: Morgan Ineson; Ed Summers; Dr. Sal Jivraj; Dr. Gordon Legge

If you have questions about your eye condition or would like support finding resources, please contact the Fighting Blindness Canada Health Information Line at healthinfo@fightingblindness.ca or by phone at 1.888.626.2995.

Welcome and Introductions

Morgan Ineson: Welcome, everyone, and thank you so much for joining us for View Point. My name is Morgan Ineson, and I'm the Senior Manager of Education and Engagement at Fighting Blindness Canada. I'd like to begin this evening by acknowledging that in Toronto, where I'm located, we are on the traditional territory of the Haudenosaunee and the Mississaugas of the Credit First Nation, and part of the Dish With One Spoon Territory, a treaty between the Haudenosaunee Confederacy, the Anishinaabek, and Allied Nations. As we have community members and speakers joining us from across Canada and the United States, we also want to acknowledge the ancestral and unceded territory of all the Inuit, Métis, and First Nations people from whom this land is home.

Before we begin, I'd also like to thank our 2026 View Point sponsors who've made this program possible — a big thank you to our presenting partner, Bayer, our Connections partner, Roche, and our Insights partners, Astellas, Beacon Therapeutics, and Rhythm



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Pharmaceuticals. For anyone newer to us, Fighting Blindness Canada funds vision research, advocates for access to new treatments, and offers education and connection opportunities for people living with blinding eye diseases. You can learn more online at fightingblindness.ca.

Tonight's webinar is a bit different from some of our past sessions. Technology is evolving at an incredible pace, and with that comes new opportunities for people living with vision loss. We're going to explore what that looks like in practice — from artificial intelligence and mainstream accessibility features to low-vision devices and emerging innovation — what's already possible today, where there are gaps, and what might be coming next.

If you have questions at any point, you can use the Q&A box in Zoom or email us at education@fightingblindness.ca. If we're unable to answer your question tonight, or it's more related to your personal eye health, we'd encourage you to reach out to our Health Information Line as well — that information will be included in a follow-up email.

The views shared by our speakers today are their own and don't necessarily reflect those of Fighting Blindness Canada; mention of any products, technologies, companies, or services doesn't constitute an endorsement, and our sponsors do not influence the content of our educational programs. Today's discussion is for educational purposes, and individual experiences with technology may vary.

With that, I'm very pleased to introduce our three panelists.

Ed Summers is a blind software developer and Head of Accessibility at GitHub, where he works to make technology more inclusive for people with disabilities.

Dr. Sal Jivraj is a Calgary-based optometrist specializing in low vision rehabilitation and emerging technologies for people with sight loss.

And Dr. Gordon Legge is a Distinguished McKnight University Professor of Psychology and Neuroscience at the University of Minnesota and director of the Minnesota Laboratory for Low Vision Research, whose work focuses on reading, mobility, and low vision, and who brings both decades of research expertise and lived experience with low vision to our conversation.



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Ed, Gordon, and Sal, thank you all so much for joining us.

Biggest Developments in Accessibility Technology

Morgan Ineson: Technology for people with vision loss has changed enormously in recent years. From your perspective, what development has had the biggest impact, or has the greatest potential to make a difference?

Ed Summers: I don't think I can narrow it down to just one, but at the top of my list is the accessibility features built into our mainstream devices and operating systems — our phones, laptops, and other consumer tech. That certainly wasn't the case even 10 or 15 years ago. There's a ton of great built-in features that benefit people who are blind or have low vision: zooming and magnification, easily changing colours, and built-in screen readers. I think of those as foundational accessibility technology, because without them, it would be hard to benefit from any of the accessible apps built on top. You can walk into any store, buy these devices, and they already have these features built in — no extra cost, no extra hardware. I'd also point to mobile technology in general — the fact that the devices we carry in our pockets have great cameras, speakers, and cloud connectivity for processing power opens up all kinds of potential. And of course, generative AI is truly, right now, opening up a world of possibilities for those of us with blindness or vision loss.

Dr. Sal Jivraj: I completely agree with Ed. What's happening with AI and generative AI, and in the tech space more broadly, is unbelievable — I was fortunate enough to attend the CES conference in Las Vegas last year, and the number of tech companies moving into this space was remarkable. We're seeing smart glasses that can help you see around a space and, as processing power and connectivity improve, we're going to see companies invest not just in what you can see, but in navigation — going from point A to point B, similar to a self-driving car that knows where you are, has cameras around it, can sense a danger or tripping hazard, and adjusts. The future is extremely bright.

Dr. Gordon Legge: I'm old enough to take a slightly longer historical view, and I'll build on what Ed and Sal said. Since my days as a student, we've had a huge transition from hard-copy text to digital text — the beauty of digital text is that it can be rendered



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visually, in audio, or in braille, and customized to users with different needs. That's been a huge and valuable shift. I'd also point to internet accessibility as a whole — I can download books, audio, or braille, do my shopping or banking, take classes, and teach my own students over Zoom, and most of this is accessible for visually impaired people. That's been a hugely exciting shift. I know we'll come back to AI, so I won't say much there yet, but I'd also add an interest we all share in high-tech medical solutions — sight restoration, treating progressive eye disease, retinal implants, gene therapy — with both promise and limitations, but definitely worth watching.

What Does “Truly Accessible” Mean?

Morgan Ineson: We hear the word “accessible” a lot, and there are certain standards people have to meet — but what does accessible truly mean? What separates something that's technically accessible from something that truly works well for people with vision loss?

Dr. Gordon Legge: I'll answer that a couple of ways. First, the obvious factors that affect accessibility — cost, availability, how much training is required, and whether there's any stigma or social factors involved. Ed mentioned the importance of inclusive design in mainstream products, and that's a huge issue: there's a lot of great, specialized assistive tech out there, but inclusive mainstream devices often have a real advantage in cost and acceptability. I'd also draw a distinction between what I'd call nominal accessibility versus practical accessibility. There are lots of apps and websites that are nominally accessible for screen readers or magnification — the controls are labelled, and a screen reader will speak the name of a control if you land on it — but the underlying design is fundamentally visual-centric, built for visual ease of use. So even though something is nominally accessible, it's often not practically accessible — very hard to navigate or figure out with a screen reader or magnification, even though it technically meets the standard.

Morgan Ineson: That's a really important distinction, because if it's not truly accessible, it's not serving its purpose. Ed, building on what Gordon said — what do you think tech developers are getting right, and where are the gaps?

Ed Summers: I agree with Gordon completely, and the way I phrase it is that compliance with accessibility standards is a floor, not a ceiling — it's a baseline, and



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there's a lot of headroom above it. Think of it like building a house: it has to comply with local building codes for safety, electrical, and plumbing to get a certificate of occupancy, but that leaves a lot of room for whether the house is actually beautiful or functional to live in day to day. Digital devices are similar. I'd also draw out the difference between accessibility and assistive technology, since those two concepts often get conflated. Accessibility is a property of the things we build for humans to use — it's the responsibility of the people building those things. Assistive technology is different: it's tools, low-tech or high-tech, that a person with a disability carries with them and brings to the table, like a screen reader I bring to your website. The accessibility of your website is your responsibility; it's my responsibility to know how to use my assistive technology effectively, assuming you've built your site to be compatible with it.

On the accessibility side, one place the tech industry has done a great job is in the digital infrastructure itself — the standards that run the web, like HTML, and operating systems like iOS and Windows. There's a relatively small number of people, well under 100,000, who build and maintain that foundational infrastructure, and they keep accessibility in mind constantly. That makes it possible for any application developer or content creator to build on top of that foundation to make their own content accessible — though not everyone does, which is where we still fall down. But we're getting better at creating accessible defaults, so that if you build on that foundation and don't intentionally break it, you get a lot of accessibility essentially for free. And because of that foundational work, if someone does run into an accessibility problem with a modern app, there's usually a clear path to fixing it and people can advocate for that, rather than starting from scratch. So overall, this is trending in a really good direction — it might be two steps forward, one step back at times, but the trend is positive.

Finding the Right Technology for You

Morgan Ineson: Sal, you've been to a lot of our in-person events with a big table of devices, magnifiers, and resources. For someone newly diagnosed, or new to a vision loss journey, all of this — the devices, the apps, the features — can feel overwhelming. Where should someone start when figuring out what technology might actually help them, and what role does low vision support, like yourself or a vision loss rehab organization, play in that?



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Dr. Sal Jivraj: When I see patients in clinic, the first thing I ask is: what do you want to be able to do or see? If someone wants to read a book, there are devices for that; if they want to watch TV, we're rehabilitating them for that specific task. Going back to the earlier point about accessibility, I always say the best technology isn't necessarily the most advanced technology — it's the technology the patient will actually use. I've had patients where I thought I'd done a fantastic job narrowing things down, and they still weren't happy, because it didn't fit their life or environment. So my advice is always to start by speaking with your low vision optometrist or ophthalmologist about what's possible for your specific condition.

For something like macular degeneration, dry or wet, the central field is affected, so we can magnify the image — but the larger the magnification, the narrower the field of view, so again it comes back to what the person wants to be able to do. I'm very pro-technology and think AI is the future, but I have patients from 18 to 95 — for some, AI tools aren't for them, and for others, like a 95-year-old patient of mine, they love it. It really comes down to listening to the person's history, symptoms, and goals. For some, it's as simple as wanting a pair of glasses with a built-in telescope so they can watch TV comfortably at home. In Ontario and Quebec, it's now legal to drive with a bioptic telescope — something that's only become possible in the last year or so — where you look through your normal glasses, and tilt your chin down to look through a small telescope when you need to see something more clearly. For some patients, that's a game changer, because they just want to put something on and see more clearly without learning new technology.

Generally, we start with the simplest option — a hand or stand magnifier — and build up from there, and I'd encourage people to look at organizations that let you try things out. But going back to accessibility, for me it really comes down to education and training. I've had patients in their 80s and 90s who I've shown a short training video of what a device does, and it clicks for them. When I worked in the low vision department at a hospital in Calgary, I had a lot of patients who just wanted to know how to use something, so I recorded about 20 free videos — three to four minutes each — covering what each technology is, how to use it, the benefits, the costs, and the pros and cons, for basically every category of device. If a family member can turn on the TV and search "low vision," these videos come up, and it's a nice way to get oriented.



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AI and Accessibility: Where It's Already Making a Difference

Morgan Ineson: AI has created so much excitement around accessibility. Ed, where are you already seeing AI make a really meaningful difference for people?

Ed Summers: I'd focus on access to images and video content — whether that's static images on your hard drive, or images and video you're capturing in real time with your camera. In just the last three or four years, we've seen huge capability come online with free apps like Seeing AI and Be My Eyes, which has a feature called Be My AI — at no cost at all, you can get information about what's in your environment using your phone. One of the most exciting, cutting-edge areas right now is the ability to get live descriptions and have an ongoing conversation about a live video feed. I use Gemini Live, which is free with a Google account — it connects you to an AI assistant you can talk to that can see your phone's live camera feed. In the past, if I was looking for something like mayonnaise in the fridge, I'd photograph one jar at a time and ask what it was. Now, I can open the fridge, point at the shelf of condiments, and ask, “Where's the mayonnaise?” and it will tell me it's on the top left in real time. It's cutting-edge, and it's frequently wrong, so you have to verify what it tells you — but it's improving day by day, and there's a lot of potential there.

Morgan Ineson: For anyone who asked in the chat about apps for people with vision loss — Be My Eyes, Seeing AI, and Gemini were mentioned. Ed, any others you'd recommend?

Ed Summers: For AI specifically, I use Microsoft Copilot a lot, and ChatGPT for certain things as well. Beyond AI, there are also GPS apps and reading apps I use regularly, which are great too, just not AI-specific.

AI: Promise, Limits, and the Risk of Being Left Behind

Morgan Ineson: Gordon, from both your research and your own lived experience, what feels really significant about AI right now compared to past technology shifts?



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Dr. Gordon Legge: As a university faculty member I see the good, the bad, and the ugly of AI — though the issues with student assignments are probably off-topic for tonight. Reflecting on what Ed said about access to graphics: visually impaired people have had pretty good access to text for a while now, but the real frontier is access to graphics — streaming graphics, maps, pictures, data figures. AI may help bridge that frontier, and it's already helpful in some respects. One small app I use is called Live Read — you point it at something and it reads whatever it sees aloud through speech. That said, one caveat: there's great promise here, but AI could leave the blind and visually impaired community behind.

One example is self-driving cars — there was early promise that people with impaired vision would suddenly be getting around independently in self-driving cars, but we're quite a long way from that, and there are real accessibility issues even with hailing a Waymo or other self-driving taxi. So, great promise, but like a lot of tech, there's a risk of being left behind.

Dr. Sal Jivraj: I think AI is going to be the future. With tools like Claude and ChatGPT's new computer-use features, someone who is sight-impaired could talk to their computer and say, “check my emails and tell me what they say,” and have the AI open things up and act on their behalf. That comes with pros and cons — there are real privacy and security considerations — but with education and training, I think the low vision community stands to see a real improvement in quality of life. That said, there's a risk of a two-tiered outcome, where only those who can understand and use these tools benefit.

At the same CES conference in Las Vegas, I saw a company with a walking-stick-style device linked to Google Maps with built-in LiDAR — very early stage. But as I said, the best technology isn't always the one that helps the low vision community most; it's about bringing powerful capability down to something simple and usable. Sometimes that's as simple as a pair of glasses with the technology built in. For example, I was in the UK recently where surgeons are using digital microscopes during surgery to enhance what they see through the optics — even where their own vision is limited, the built-in digital enhancement reduces the need for extra training, because it's simply built into what they're already looking through.



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I agree with Gordon that there need to be checks and balances — a mistake from a self-driving car or a misread from AI can mean a fall or a broken bone for someone in the low vision community, so the training and safeguards have to go hand in hand with the technology. I do think the trajectory for smart glasses with a built-in display, which already exist in the US, is toward simply asking your glasses to magnify what you're looking at, without needing to program anything.

Morgan Ineson: Ed's mayonnaise example is a good one — AI making a small mistake in the fridge is one thing, but the stakes are higher when you're out in the world. We know these systems are improving all the time. I see a number of questions in the chat about Meta smart glasses specifically — we won't have time to get into those tonight, but Sal has a pair with him, and our friend Steve Ricci, who'll be joining the breakout rooms, also uses them, so that's a great topic to bring to the breakout session.

Closing Recommendations

Morgan Ineson: As we wrap up the panel, I'd love for each of you to share one technology — something emerging you're watching closely, or something you already use that you think everyone should know about. Ed, let's start with you.

Ed Summers: Before that, I want to reinforce Sal's point about low-tech solutions — I wholeheartedly endorse looking for the simplest, even no-tech, solution first, because tech can complicate things, break, or run out of battery. Even someone as immersed in the tech world as I am mainly survives on low-tech or no-tech strategies first. What I'm most excited about and watching closely is the ability for people with disabilities to build their own solutions and overcome their own access barriers, because natural language has become the universal programming language — you can describe the access barrier you're facing or the thing you want to build, and in many cases make real progress toward a working prototype. Someone mentioned voice-first email earlier — I recently saw a person with a disability who built their own voice-first email client from scratch. It's never been easier to build things, and that's something I'm trying to push at GitHub — helping people with disabilities build things for themselves and their communities. I'll leave you with one resource: the Double Tap Podcast, hosted by two people who are blind or visually impaired, discussing this kind of technology daily in a 40-to-50-minute episode. You can find it on YouTube or any podcast app.



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Morgan Ineson: That's a great one — we'll include it in our follow-up email, along with Sal's videos, since a few people in the chat asked us to repeat the app names.

Dr. Gordon Legge: Largely repeating what we've already discussed — I think one of the big frontiers is accessibility of pictorial material and graphics, and we're making real progress there through image and video description, as Ed described. We've pretty much solved accessibility of text, and we're at least beginning to solve accessibility of graphical, pictorial, and video material. That's what I'm following with interest.

Dr. Sal Jivraj: We've talked a lot about AI tonight, but I'm actually most excited about bioptic glasses and their ability to help people keep driving. The research shows that patients who maintain their driver's licence have a better quality of life, fewer mental health challenges, and are less likely to end up in the emergency room from a slip or fall. A lot of patients don't know what a bioptic actually is — it's essentially a small telescope built into your glasses that you look through when you need to see something farther away, and it's now legal to drive with one in Ontario and Quebec. There's also a government program that helps fund part of the cost, and the University of Waterloo in Ontario can help patients access bioptic glasses along with a grant toward the fees. Another area people often don't know about is side-awareness glasses for patients who've had a stroke and lost vision on one side — they use a prism to bring the image from the side you can't see into the area you can see. That's been a game changer for some of my stroke patients, though there are currently only four practitioners in Canada who do this. And for patients who are borderline for the driving standard in Alberta, there's a lens called e-scoop glasses — a thick lens that magnifies about 1.3 times and is legal to drive with. So while AI is the future, sometimes the simplest advances in glasses technology make just as much of a difference for independence and quality of life.

Morgan Ineson: We're going to have to stop there, though we could keep going all night — thank you so much to Ed, Gordon, and Sal for such a thoughtful discussion